REMARKS/ARGUMENTS

In view of the above amendments and the following remarks, reconsideration and a withdrawal of all rejections, and allowance of the pending claims is earnestly solicited.

The Declaration of the Applicant Establishes an Earlier Date of Invention.

A declaration from the inventor was previously submitted. That declaration included an attached illustration setting forth the invention. That drawing was in December of 1999, and the application was prepared and filed by April 2001. Thus, there was about one year and four months from the conception date to the application filing date. Applicant submits that a reduction to practice and due diligence are shown by these facts, and respectfully requests reconsideration. But even if the Examiner is not inclined to withdraw the Jordan reference in view of the previous declaration, there are additional reasons why the Applicant's presently claimed invention should be patentable, which are set forth below.

The References Fail to Teach, Suggest or Disclose the Applicant's Invention.

Claims 1-4 and 6 stand rejected under 35 USC 103(a) as being unpatentable over Jordan (2002/0073323 A1). This rejection is respectfully but strenuously traversed and reconsideration and a withdrawal of the rejection are hereby requested.

The Examiner admits that Jordan does not expressly disclose interpreting code, and seeks to rely instead on Jordan for its disclosure of an "emulator that emulates the executable code" (citing page 3 par [0028] of Jordan). The Examiner refers to the reference in Afzal where text states "the emulator (instruction by instruction interpreter) is embedded in the Windows NT™ Firmware."

Applicant's present invention is not disclosed or suggested by Jordan, even considering the Afzal references which the Examiner cites. Applicant's claimed method and apparatus relate to and recite interpreting code with an interpreter and evaluatively writing the results of said interpretation, and further include the step of scanning the results of said interpretation for the presence of proscribed code. Applicant's invention is an improvement over the prior art.

Interpretation with an interpreter is distinguishable over emulation with an emulator. The reference to an emulator in Afzal, as an instruction by instruction based interpreter, does little more than accentuate the deficiency of the prior art. The Afzal reference does not provide a teaching of the Applicant's invention as disclosed and claimed. An interpreter, unlike an emulator, is not restricted to binary code, and moreover does not have to process all of the code that it encounters. Rather, an interpreter may interpret scripts at a source code level. In addition, the interpreter can increase the speed at which processing takes place. For example, unlike an emulator which is required to emulate, and hence process all of the code it encounters, the interpreter may rely on a known result from a string through memory to avoid having to process something where the result is known. This facilitates speed, and further distinguishes the Applicant's invention over prior methods.

In order to more particularly differentiate the present invention, what the Examiner refers to an emulator may be explained by its limitation as "an instruction by instruction interpreter". If that is indeed what the Afzal "interpreter" is, then the Applicant's present invention clearly would not be taught or suggested by the cited references. Applicant refers the Examiner to the Applicant's specification for a further

explanation. Applicant states that its present invention may accomplish what the prior art does not. Neither Jordan, nor the Afzal reference appear to teach or disclose Applicant's invention.

> The present invention is designed to combat disguised code. The preferred embodiments interpret suspect code as part of a virus scanning engine by first interpreting the code. Unlike emulators, compilers and interpreters commonly used in the prior art which execute code as it is interpreted, however, the interpreter used in the preferred embodiments do[es] not execute code. Rather the interpreter used in the preferred embodiments first summarily evaluates code and then writes the results to a results table for further evaluation. This process of the preferred embodiments results in ***detection of the results of the interpreted code***. This review of these results in the table is an improvement over the emulators, compilers and interpreters used in the prior art process which detected the behavior of the code.
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> Specification [0021, emphasis added]

Applicant, in order to more particularly articulate the distinguishing features of the present invention, has amended claim 1 to recite that the step of interpreting is done by interpreting code with an interpreter; and writing results is accomplished by evaluatively writing with said interpreter the results of said interpretation. These amendments are fully supported by the specification (see above), and no new matter has been introduced. Clearly, the invention in the claims, as now amended, would not be carried out by using an emulator to interpret code (as an emulator does not interpret) let alone evaluatively interpret results. It is the Applicant's claimed interpreter that accomplishes this, and the prior art fails to disclose or suggest these features.

Accordingly for the above reasons, the Applicant's present invention should be patentable over Jordan (and Afzal as relied on by the Examiner). In addition, claims 2-4 and 6, for the same reasons, should also be patentable over the cited references.

Claims 5, 7-12 stand rejected under 35 USC 103(a) as being unpatentable over Jordan (2002/0073323 A1), as applied to claims 1-4, and further in view of US 5,728,901 ("Shieh"). This rejection is respectfully but strenuously traversed and reconsideration and a withdrawal of the rejection are hereby requested.

The Examiner notes the deficiency of Jordan as failing to disclose a pattern analyzer. However, in view of the above reasons, Jordan and Afzal are deficient of a teaching or disclosure of the Applicant's present invention. Therefore, even when the proposed combination of these references with Shieh is attempted, the Applicant's invention is still not taught, suggested or disclosed. Accordingly, the rejection of claims 5 and 7-12 should be withdrawn.

In the event an extension or further extension of time is required, one is respectfully requested, and the Commissioner is hereby authorized to charge the Applicant's undersigned representative's deposit account for any fees which may be required in connection with any extension or the filing of this amendment/response.

Respectfully submitted,
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